

What is claimed is:

1. A method for producing glycerin comprising the steps of (1) contacting
a prion-contaminated fat with water at a temperature and pressure sufficient
5 to produce hydrolyzed fat and a sweet water stream comprised of water, fat
and glycerin; (2) introducing the sweet water stream into a vertical constant
temperature zone and heating the sweet water stream under pressure to a
temperature of at least 200°C; (3) allowing the sweet water stream of step (2)
to separate into a top layer comprised of fat and a bottom layer comprised of
10 glycerin and water while maintaining a temperature of the two layers of at
least about 200°C under pressure for a period of time sufficient to
substantially deactivate the prions; (4) separating the glycerin from the water.
2. The method of claim 1 wherein the prion-contaminated fat is beef
15 tallow.
3. The method of claim 1 wherein the vertical constant temperature zone
is a vertical column.
- 20 4. The method of claim 1 wherein the pressure in steps (2) and (3) is up
to about 300 psig.
5. The method of claim 1 wherein the temperature in steps (2) and (3) is
up to about 422°F.
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6. The method of claim 1 wherein the period of time in steps (2) and (3) is
at least 20 minutes.
7. A method for producing glycerin comprising the steps of (1) contacting
30 a prion-contaminated beef tallow with water at a temperature and pressure
sufficient to produce hydrolyzed fat and a sweet water stream comprised of
water, fat and glycerin; (2) introducing the sweet water stream into a vertical
column and heating the sweet water stream to a temperature of about 422°F

and under pressure of about 300 psig; (3) allowing the sweet water stream of step (2) to separate into a top layer comprised of fat and a bottom layer comprised of glycerin and water while maintaining a temperature of about 422°F and a pressure of about 300 psig for at least 20 minutes to substantially
5 deactivate the prions; (4) separating the glycerin from the water.

8. Glycerin which is the product of the process comprising the steps of (1) contacting a prion-contaminated fat with water at a temperature and pressure sufficient to produce hydrolyzed fat and a sweet water stream comprised of
10 water, fat and glycerin; (2) introducing the sweet water stream into a vertical constant temperature zone and heating the sweet water stream under pressure to a temperature of at least 200°C; (3) allowing the sweet water stream of step (2) to separate into a top layer comprised of fat and a bottom layer comprised of glycerin and water while maintaining a temperature of
15 about 422°F and a pressure of about 300 psig for a period of time sufficient to substantially deactivate the prions; (4) separating the glycerin from the water.

9. A method for deactivating prions in an aqueous glycerine mixture comprising the steps of (1) providing an aqueous mixture comprising glycerin
20 wherein the glycerin is contaminated with prions; (2) heating the aqueous mixture to a temperature of at least about 200°C and maintaining the temperature under pressure for a period of time sufficient to substantially deactivate the prions.

25 10. The method of claim 9 wherein the pressure in step (2) is up to about 300 psig.

11. The method of claim 9 wherein the temperature in step (2) is up to about 422°F.

30 12. The method of claim 9 wherein the period of time in step (2) is at least 20 minutes.